

PCN26

ESTIMATION OF THE EPIDEMIOLOGICAL EFFECT OF RITUXIMAB FOR THE TREATMENT OF AGGRESSIVE NON-HODGKIN LYMPHOMABarreto WG¹, Oliveira JSR¹, Borges LG², Santos E²¹Hospital Santa Marcelina, São Paulo, SP Brazil; ²Roche Brazil, São Paulo, SP Brazil

BACKGROUND: Non-Hodgkin lymphoma (NHL) are a heterogeneous group of malignancies of the lymphoid system and represents approximately 80% of all lymphomas. Mortality associated with NHL in Brazil has increased in the last few years, from 2772 cases in 2000 to 3194 in 2004. Aggressive NHL accounts for approximately 60% of all cases and cure can be achieved in more than 70% of cases with rates ranging 50% to 90% when under immunochemotherapy depending on the clinical stage and international prognostic index (IPI). Currently, only CHOP therapy is available to patients presenting with aggressive NHL in Brazilian Public Healthcare System. **OBJECTIVES:** To evaluate the epidemiological impact of adding rituximab (R) to CHOP first-line therapy (cyclophosphamide, doxorubicin, vincristine, and prednisone) on the annual number of patients experiencing recurrence and deaths between 2010 and 2020 in Brazil. **METHODS:** Annual aggressive NHL incidence for 2010 to 2020 was estimated by applying published age-specific NHL incidence to Brazilian population projections for the mentioned period. Projections were made for aggressive NHL and population above 20-year-olds only. Therapy effect for R-CHOP and CHOP was derived from Gao (2009) and 2-year overall survival and disease control data were adjusted for a 1-year rate. Considering the subgroups analysis, annual overall survival rate were 54.5% and 45.7% and disease control rate were 43.7% and 31.1% for R-CHOP and CHOP, respectively. **RESULTS:** Between 2010 and 2020, it is estimated that 8886 more patients would be saved if R-CHOP was given (54,917 vs. 46,031 for CHOP). Regarding disease progression, R-CHOP has the potential to control the disease in 12,703 more patients than CHOP (44,048 vs. 31,345). **CONCLUSIONS:** Findings suggest that R-CHOP has the potential to save about 16% more lives annually when compared to CHOP in the management of aggressive NHL, particularly in Brazilian patients who have late diagnosis which implies a worse prognosis.

PCN27

ESTIMATION OF THE EPIDEMIOLOGICAL EFFECT OF TRASTUZUMAB OVER THE 200–2015 PERIOD IN PORTUGALCalado F¹, Monteiro I¹, McNiven PM², Weisgerber-Kriegel UM³¹Roche Farmacêutica Química, Amadora, Portugal; ²Strategist Consulting, Austin, TX, USA;³F. Hoffmann-La Roche Ltd., Basel, Switzerland

OBJECTIVES: Trastuzumab was approved for the treatment of HER2-positive early breast cancer (EBC) in 2006 in several European countries, Portugal included. The model assesses the impact of trastuzumab treatment in EBC on the annual number of patients entering the metastatic setting between 2005 and 2015 in Portugal. **METHODS:** Annual EBC incidence for 2005 to 2015 was projected by applying stage-specific proportions for stages I–III to female breast cancer incidence rates estimated for 2008 (GLOBOCAN 2010), using a conjoint estimate based on English cancer registries, where overall breast cancer survival is comparable to that seen in Portugal. Age-specific rates were applied to UN population projections for 2000 to 2025. The annual number of patients with HER2-positive metastatic breast cancer (MBC) includes de novo and recurrent MBC patients. The baseline 10-year recurrence rate was estimated as 37%, based on 4-year follow-up in the control arm of a combined trial analysis in patients with HER2-positive breast cancer and the long-term timing of recurrence in all patients with breast cancer. To model recurrence in trastuzumab-treated EBC patients, the hazard ratio (HR) from the HERA trial (0.49; 95% CI: 0.38, 0.63) was applied. **RESULTS:** In 2004, prior to approval of trastuzumab in EBC, the pool of de novo and relapsed MBC patients was estimated to be 650. Between 2005 and 2015, the model predicts that the use of trastuzumab will result in an average annual decline in recurrence of MBC of 5.2% (95% CI: 3.0, 6.7). Cumulative recurrence prevented by trastuzumab treatment between 2005 and 2014 (projected through full 10-year window for recurrence) is projected to be 884 (95% CI: 537; 1075). **CONCLUSIONS:** Trastuzumab treatment of HER2-positive EBC over a 10-year period is expected to prevent nearly 900 women from developing metastases in Portugal, which may result in a similar number of breast cancer deaths being avoided.

PCN28

UTILIZATION OF ANTIEMETIC PROPHYLAXIS ALONGSIDE CHEMOTHERAPY IN FOUR EUROPEAN COUNTRIESCristeau O¹, Toumi M²¹Creative Ceutical, Paris, France; ²University Claude Bernard Lyon 1, Lyon, France

OBJECTIVES: To investigate prescription patterns for setron antiemetics used alongside chemotherapy in France, Germany, Italy, and the UK. **METHODS:** Prescription data from June 2008 to July 2009 were extracted from the Synovate Oncology Monitor, an ongoing database tracking prescriptions of anticancer therapies and concomitant medications. Patients receiving setron prophylaxis (dolasetron, granisetron, ondansetron, palonosetron, or tropisetron) with Moderately emetic chemotherapy (MEC) or highly emetic chemotherapy (HEC) were selected. **RESULTS:** The sample included 1715, 1658, 1830, and 1651 patients with MEC regimens in France, Germany, Italy, and UK, respectively, and 557, 761, 903, and 627 patients with HEC regimens. Ondansetron was used in 85.1%, 45.8%, 52.1%, and 83.3% of patients with MEC regimens in France, Germany, Italy, and UK respectively, and 92.5%, 46.0%, 43.8%, and 62.2% of patients with HEC regimens. The shares of different setrons were relatively similar between MEC and HEC regimens in Germany, a stronger

association between setron and regimen category was found in other countries, with different trends according to country. Doses of setrons were slightly higher for HEC regimens than for MEC regimens in Italy, but substantially higher in other countries. The average daily dose was found to increase with treatment duration in all countries. Neurokinin 1 antagonists (NK1) were used alongside setron in up to 46% of patients in Germany, depending on setron, but were very rarely used in Italy. **CONCLUSIONS:** Utilization of setrons and concomitant medications (NK1, antipsychotics) varied widely between European countries. It appears that German prescribers adapted the dose of setron rather than the drug according to regimen category, contrary to Italian prescribers. Such international comparisons may provide useful insight for improving practice in different countries.

PCN29

EPIDEMIOLOGY AND HEALTH-CARE UTILIZATION FOR RESECTED SQUAMOUS CELL CARCINOMA OF HEAD AND NECK (SCCHN) IN SOUTH KOREAKim K¹, Amonkar M², Lykopoulos K³, Kasteng F¹, Högberg D¹¹13 Innovus, Stockholm, Sweden; ²GlaxoSmithKline, Philadelphia, PA, USA; ³GlaxoSmithKline, London, UK

OBJECTIVES: In South Korea, 2617 new cases of head and neck cancer (HNC) were diagnosed and 1473 deaths were reported in 2005. In Western countries, SCCHN represents more than 90% of HNCs and surgery is the primary treatment modality for SCCHN. Chemotherapy is often an important treatment component combined with radiotherapy for patients diagnosed with locally advanced disease. This study aimed to estimate the number of resected SCCHN patients and describe their treatment and health-care utilization in South Korea. **METHODS:** The study included the following cancer sites: oral cavity, pharynx, and larynx. The main source of data for the probabilities of having different types of SCCHN treatments was results from retrospective analyses found through literature review using MEDLINE, EMBASE, Cochrane, and the Korean Medical Database. Cancer incidence was based on data from the National Cancer Registry. In addition, expert opinion of a HNC surgeon in South Korea complemented the literature review. **RESULTS:** We estimated that SCCHN constituted 91% of HNC cases; 69% of the SCCHN cases were surgically resected. The number of new cases of resected SCCHN in South Korea was 1642 (oral cavity, 501; pharynx, 397; and larynx, 744). Fifty-two percent of resected SCCHN patients had neck dissections (45% of them were radical neck dissections) and 6% of resected SCCHN patients had total laryngectomy. Ten percent of patients had secondary surgery and 75% had reconstructive surgery. Sixty-four percent of patients received radiotherapy, whereas 33% received chemotherapy combined with surgery or as concomitant therapy with radiotherapy. **CONCLUSIONS:** In South Korea, resected SCCHN is estimated to constitute 1% of all cancers. However, 29% of patients with resected SCCHN had major surgeries (radical neck dissection or total laryngectomy), causing a significant negative impact on the quality of life of patients and contributing to a high economic burden to the patients and society.

PCN31

THE PREDICTIVE AND PROGNOSTIC ROLE OF ERCC1 IN ADVANCED NON-SMALL CELL LUNG CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS

Roth J, Carlson JJ

University of Washington, Pharmaceutical Outcomes Research and Policy Program, Seattle, WA, USA

OBJECTIVES: ERCC1 mRNA expression has the potential to be a useful tool in the clinical treatment of advanced NSCLC; however, considerable uncertainty remains as to the biomarker's magnitude of effect on tumor response and survival. The objective of this study was to evaluate the association between ERCC1 mRNA expression level and treatment outcomes in advanced NSCLC patients treated with platinum-based chemotherapy using a systematic review and meta-analytic techniques. **METHODS:** A systematic search of the literature was conducted using MEDLINE and EMBASE databases from June 1995 to May 2010. Additionally, a search of ASCO Annual Meeting abstracts was conducted. Eligible studies were evaluated for clinical, methodological, and statistical heterogeneity. Pooled **RESULTS:** The pooled analysis demonstrated a statistically significant higher probability of response (according to the RECIST criteria) to platinum-based chemotherapy for patients with low ERCC1 mRNA expression levels relative to patients with high ERCC1 mRNA expression levels (OR: 0.64, 95% CI 0.42–0.95). Low ERCC1 mRNA expression level was also associated with significantly improved overall survival relative to high mRNA expression levels (HR: 0.44, 95% CI 0.31–0.62). **CONCLUSIONS:** In conclusion, ERCC1 mRNA expression level may provide useful clinical information in terms of the likelihood of platinum-based chemotherapy response and overall survival prognosis. Ongoing analyses are focused on evaluating the predictive role of ERCC1 in overall survival. The findings of this analysis also reveal a need for standardization in characterizing “high” and “low” ERCC1 mRNA expression, as the studies evaluated herein varied considerably in their methods.